



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/559,529

04/13/2006

Mitsuru Tanikawa

Q91465

2707

23373 7590 10/14/2008
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

MCCULLEY, MEGAN CASSANDRA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,529	Applicant(s) TANIKAWA ET AL.	
	Examiner Megan McCulley	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/18/2007; 4/19/2007; 5/9/2006; 4/13/2006;</u> | 6) <input type="checkbox"/> Other: _____ |
| <u>3/6/2006; 12/2/2005</u> | |

DETAILED ACTION

Election/Restrictions

Claims 1-18 and 23-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 30, 2008.

Applicant's election without traverse of claims 19-22 in the reply filed on June 30, 2008 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in claim 19 if the "cured product having a glass transition temperature of 120 °C or higher" mentioned in line 6 is an additional component that the composition contains, or if when the claimed composition is cured, the resulting product has this property. For the purpose of further examination, the later interpretation is taken, as evidenced by paragraph 106 of the pre-grant publication of this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (JP 07-224144) in view of Yagi et al. (U.S. Pat. 6,566,422). The English language machine translation of the Japanese document is used for the citations below.

Regarding claim 19: Nakayama et al. teaches a composition comprising an resin (abstract) which is heat curable (page 6 para. 11), a polymerization initiator (page 6 para. 12 line 24), and a resin particle (abstract) with a core having rubber elasticity

Art Unit: 1796

(page 4 para. 9) and a glass transition temperature of -20°C or less (abstract) and a shell comprising a polymer with a glass transition temperature of $50\text{--}150^{\circ}\text{C}$ (abstract).

Nakayama et al. does not teach that the glass transition temperature of the cured product has a glass transition temperature of 120°C or higher measured by dynamic mechanical analysis under conditions of temperature rising rate of $5^{\circ}\text{C}/\text{min}$ and of a frequency of 10 Hz. However, Yagi et al. teaches a similar composition with a cured glass transition temperature of $120\text{--}200^{\circ}\text{C}$ (abstract). Nakayama et al. and Yagi et al. are analogous art because they are both concerned with the same field of endeavor, namely bonding compositions comprising coated resin particles. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the cured glass transition temperature of Yagi et al. with the composition of Nakayama et al. and would have been motivated to do so for such desirable properties as superior fastness to environmental conditions, as evidenced by Yagi et al. (col. 7 lines 55-63).

It is the Office's position that the technique used for measuring the glass transition temperature of the cured product does not clearly define the instant composition over that disclosed in the prior art since it does not change the structure or function of the product. If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain a composition with these properties.

Art Unit: 1796

Regarding claim 20: Nakayama et al. teaches the particles have a size of 1-10 micrometers (page 4 para. 8), which overlaps the claimed range.

Regarding claim 21: Nakayama et al. teaches the core polymer can be an acrylate or a methacrylate (page 4 para. 9).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (JP 07-224144) in view of Yagi et al. (U.S. Pat. 6,566,422) as applied to claim 19 above and in further view of Kishi et al. (US 2002/0009581). The English language machine translation of the Japanese document is used for the citations below.

Regarding claim 22: Nakayama et al. teaches the basic claimed composition as set forth above. Not disclosed is the adhesive strength of 150 N/cm². However, Kishi et al. teaches a similar composition having an adhesive strength between 65 and 140 MPa, which is 6500-14000 N/cm². Nakayama et al. and Kishi et al. are analogous art because they are both concerned with the same field of endeavor, namely bonding compositions comprising rubber particles. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the adhesive strength of Kishi et al. with the composition of Nakayama et al. and would have been motivated to do so for such desirable properties as a product being able to hold heavier loads.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./
Supervisory Patent Examiner, Art Unit 1796
13-Oct-08

/M. M./
Examiner, Art Unit 1796